

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENTEE: **NEIER, Benjamin R., et al.**
PATENT NO: **7,172,137 B2**
ISSUED: February 6, 2007
TITLE: MATERIAL SPREADER AND METHOD FOR USING SAME

**REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT
FOR PTO MISTAKE (37 CFR § 1.322(a))**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
ATTN: Decision and Certificate of Correction
Branch of the Patent Issue Division

Dear Sir:

Attached is Form PTO-1050 suitable for printing.

The exact page and line number where the errors are shown correctly in the application
file are:

Page 4, lines 5-22 and page 5, lines 1-2 of the Amendment filed September 5, 2006.

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

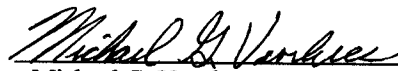
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Division Decision and Certificate of Correction.

Date: 5-30-07


Michael G. Voorhees

COMES NOW the above named Applicant and request that claims 4 through 8 be amended to include the language as set forth in the Amendment attached hereto.

The Amendment attached hereto was filed on September 5, 2006, and was the last amendment filed in the present application. The Amendment leaves claims 4 and 5 as originally filed and amends claims 6-8 as set forth in the enclosed Amendment.

Because this was a Patent Office error, Applicant respectfully requests that the present Patent No. 7,172,137 be amended to include the language of claims 4-8.

Please send the Certificate to: Michael G. Voorhees, McKee, Voorhees & Sease, P.L.C., 801 Grand Avenue, Suite 3200, Des Moines, IA 50309-2721.

Respectfully submitted,



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- MGVP/pw -

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

PATENT NO : **7,172,137 B2**
DATED : **February 6, 2007**
INVENTOR(S) : **NEIER, Benjamin et al.**

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 4, claim 4, line 66 - Col. 5, line 2:

DELETE: after according to claim "2 wherein the chain and sprocket assembly comprises a sprocket and a roller spaced apart from one another and mounted for rotation about first and second axes."

ADD: after according to claim --1 wherein the beater assembly comprises a plurality of beater bars mounted to the spreader box for rotation about a plurality of upstanding axes.--

Col. 5, claim 5, line 3:

DELETE: after according to claim "4 wherein the chain and sprocket assembly comprises a chain engaging the sprocket for causing rotation thereof."

ADD: after according to claim --1 wherein the beater assembly comprises a plurality of beater bars mounted to the spreader box for rotation about a plurality of horizontal axes.--

Col. 5, claim 6, line 6:

DELETE: after according to claim "5 wherein the sprocket is located outside the material storage chamber."

ADD: after according to claim --2 wherein the chain and sprocket assembly comprises a sprocket and a roller spaced apart from one another and mounted for rotation about first and second axes.--

Col. 5, claim 7, line 8:

DELETE: after according to claim "1 wherein the beater assembly comprises a plurality of beater bars mounted to the spreader box for rotation about a plurality of upstanding axes."

ADD: --after according to claim --6 wherein the chain and sprocket assembly comprises a chain engaging the sprocket for causing rotation thereof.--

Col. 5, claim 8, line 12:

DELETE: after according to claim "1 wherein the beater assembly comprises a plurality of beater bars mounted to the spreader box for rotation about a plurality of horizontal axes."

ADD: after according to claim --7 wherein the sprocket is located outside the material storage chamber.--

MAILING ADDRESS OF SENDER:

PATENT NO. **7,172,137 B2**

Michael G. Voorhees, Reg. No. 25,715
McKee, Voorhees & Sease, P.L.C.
801 Grand Avenue, Suite 3200
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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : NEIER, Benjamin R.
SERIAL NO : 10/673,625
FILED : September 29, 2003
TITLE : MATERIAL SPREADER AND METHOD FOR USING SAME

Grp./A.U. : 3752
Examiner : GANEY, Steven J.
Conf. No. : 2544
Docket No. : P06057US00

AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action dated July 24, 2006, please amend the above-identified application as follows:

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

☐ deposited with the United States Postal Service with sufficient postage as First Class mail in an envelope addressed to the Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

ELECTRONIC/FACSIMILE

☒ transmitted by electronic/facsimile to the Patent and Trademark Office, Art Unit 3752 at Fax No. (571) 273-8300.

Date: 9-5-06


MICHAEL G. VOORHEES

Amendments to the Specification

Please amend the paragraph beginning at page 5, line 21 and ending on page 6, line 9 as follows:

A hydraulic motor 80 is mounted adjacent the front of the spreader box 12 and drives the chain/sprocket assembly 28 by rotating the sprocket 50. The result of this driving action is that the belt 30 and the sliding barrier 38 are moved rearwardly from their initial position shown in Figure 2 toward the intermediary position shown in Figure 3. Ultimately the barrier 38 moves completely to the rear of the spreader box 12, thereby discharging all of the material within the spreader box 12. The belt 30 and the chain assembly 28 can then be retracted to their position in Figure 2 at the end of the cycle. The belt 30 covers the complete bottom wall 20 to the rear of barrier 38. That is, ~~belt 20~~ belt 30 spans the width of bottom wall 20, and also spans the length of wall 20 rearward of barrier 38. The edges of belt 30 fit within grooves 82. Thus the belt 30 underlies and supports the material 54 and carries it toward the open rear end 18 of box 12. Prior designs must either push or drag the material 54. Using belt 30 reduces the amount of power required to move the material 54.

Please amend the paragraph beginning at page 6, line 14 as follows:

Furthermore, the belt 30 has its lateral edges guided in slots 82 (Figure 4). This ensures that all of the material is removed during the movement of the belt 30 and the sliding barrier 38 to their rearward position.

Amendments to the Claims

Claim 1 (Currently amended): A material spreader for spreading a quantity of material comprising:

a material spreader box having a bottom wall and opposite side walls forming a storage chamber for storing the quantity of material;

the bottom wall having a front end, rear end, and opposite side edges from which the opposite side walls extend upwardly;

a discharge opening in the material spreader box adjacent the rear end of the bottom wall;

a conveyor belt superimposed over the bottom wall and positioned for supporting the quantity of material contained within the storage chamber, the conveyor belt having a width and that causes the conveyor belt to substantially completely cover the width of the bottom wall;

a barrier connected to the conveyor belt;

drive mechanism connected to the conveyor belt for moving the conveyor belt and the barrier relative to the bottom wall in a rearward direction toward the rear end of the bottom wall ~~of the spreader box~~, whereby the conveyor belt and the barrier will together carry the quantity of material within the storage chamber in a rearward direction and will discharge the material through the discharge opening at the rear end of the bottom wall;

a beater assembly mounted to the rear of the box for engaging and spreading the material exiting from the discharge opening of the rear wall.

Claim 2 (Original): The material spreader according to claim 1 wherein the drive mechanism comprises a chain and sprocket assembly connected to the conveyor belt.

Claim 3 (Original): The material spreader according to claim 2 wherein the chain and sprocket assembly is located outside the storage chamber and is free from contact with the quantity of material stored within the storage chamber.

Claim 4 (Original): The material spreader according to claim 1 wherein the beater assembly comprises a plurality of beater bars mounted to the spreader box for rotation about a plurality of upstanding axes.

Claim 5 (Original): The material spreader according to claim 1 wherein the beater assembly comprises a plurality of beater bars mounted to the spreader box for rotation about a plurality of horizontal axes.

Claim 6 (Currently amended): The material spreader according to claim 2 ~~and further comprising a first roller and a second~~ wherein the chain and sprocket assembly comprises a sprocket and a roller spaced apart from one another and mounted for rotation about first and second roller axes, respectively, the conveyor belt being continuous and being trained around at least one of the first and second rollers.

Claim 7 (Currently amended): The material spreader according to claim 6 wherein the chain and sprocket assembly comprises ~~a sprocket connected to at least one of the first and second rollers and a chain engaging the sprocket for causing rotation thereof of the one of the first and second rollers.~~

Claim 8 (Currently amended): The material spreader according to claim 7 wherein the ~~chain and the sprocket are~~is located outside the material storage chamber.

Claim 9 (Currently amended): A method for spreading a quantity of material comprising:
taking a spreader box having opposite sidewalls and a rear discharge opening therein, and a
bottom wall forming a material chamber;
mounting a conveyor belt within the material chamber in close covering relation over the bottom
wall and substantially covering the width of the bottom wall;
attaching a barrier to the conveyor belt;
inserting the quantity of material within the material chamber between the barrier and the
conveyor belt so that the quantity of material rests upon the conveyor belt;
moving the conveyor belt and the barrier toward the discharge opening whereby the quantity of
material will be moved toward and discharged from the material chamber through the
discharge opening;
engaging and spreading the material being discharged from the discharge opening.

Claim 10 (Currently amended): The method of claim 9 wherein the step of moving the
conveyor belt comprises using a movable chain and sprocket assembly connected to the conveyor
belt and the barrier to move the conveyor belt and the barrier toward the discharge opening.

Claim 11 (Currently amended): The method of claim 10 and further comprising
maintaining the chain and sprocket assembly ~~outside the material chamber~~ away from the

material on the conveyor belt so that the chain and sprocket assembly does not engage the quantity of material.

Claims 12-13 (Cancelled)

Claim 14 (Currently amended): The method of claim ~~13~~11 and further comprising using a chain trained around a sprocket ~~connected to the at least one roller to rotate the at least one roller~~
mounted for rotation on the spreader box.

Claim 15 (Currently amended): A method for spreading a quantity of material comprising:
taking a spreader box having a pair of opposite side walls and a bottom wall forming a material chamber, the bottom wall having front and rear ends, the spreader box having a discharge opening located adjacent the rear end of the bottom wall;
training a continuous belt/chain assembly around a chain sprocket and a belt roller, the belt/chain assembly comprising a belt located within the material chamber in close covering relation over the bottom wall and substantially covering the width of the bottom wall, ~~and a chain~~
a barrier connected to the belt, and an elongated chain connected to the barrier and
connected to the belt;
inserting the quantity of material within the material chamber so that the quantity of material rests upon the conveyor belt;
moving the conveyor belt and the barrier toward the discharge opening whereby the quantity of material will be moved toward and discharged from the material chamber through the discharge opening;

engaging and spreading the material being discharged from the discharge opening; and
maintaining the chain free from contact with the material within the material chamber at all
times.

REMARKS

EXAMINER'S OBJECTIONS TO THE SPECIFICATION.

Applicant has amended page 6 of the Specification as required by the Examiner and therefore this correction is believed to comply with the Examiner's requirements.

EXAMINER'S OBJECTIONS TO THE DRAWINGS

Applicant has amended the claims, specifically claims 6, 7, 12 and 13 in such a manner that the first and second rollers are not required in the drawings. Therefore, Applicant has eliminated the necessity for amending the drawings as required by the Examiner.

EXAMINER'S CLAIM REJECTIONS UNDER 35 U.S.C. § 112

Applicant has amended the claims so as to overcome the Examiner's rejections. The first rejection was to claims 6-8 and 12-14. Claims 6-8 have been amended and claims 12 and 13 have been cancelled. Claim 14 has been amended as well. It is believed that these amendments to the claims eliminate the requirement of a first and second roller and therefore comply with the Examiner's requirements.

The Examiner also rejected the claims as being indefinite under the second paragraph of 35 U.S.C. § 112 for omitting essential elements, namely the sliding barrier 38. Applicant has amended the claims as follows.

Claim 1 has been amended to include a barrier connected to the conveyor belt. It is believed that the amendment to claim 1 complies with the Examiner's requirement.

Applicant has amended claims 6-8 to eliminate the requirement of the first and second rollers, and also to clearly set forth the chain and sprocket assembly. Accordingly, it is believed that claims 6-8 are also in compliance with the Examiner's requirement.

Applicant has amended claim 9 to require the step of attaching a barrier to the conveyor belt. In addition, Applicant has amended the claim to require inserting the quantity of material within the material chamber "between the barrier and the conveyor belt". This is also believed to comply with the Examiner's requirement and therefore it is believed to meet the Examiner's objections.

Claims 10 and 11 have been amended to provide antecedent support.

Claims 12 and 13 have been cancelled.

Claim 14 has been amended to eliminate the requirement of the first and second rollers.

Claim 15 has been amended to require the training of a continuous belt/chain assembly around a chain sprocket and a belt roller, the belt chain assembly comprising a belt, and a barrier connected to the belt as well as a chain connected to the barrier. It is believed that this complies with the Examiner's requirement and therefore claim 15 is believed also to be allowable.

CLAIM REJECTIONS UNDER 35 U.S.C. §§ 102 and 103

The Examiner has rejected claims 1-14 under 35 U.S.C. § 102 and § 103. The Examiner has cited numerous references including the Groeneveld reference, the Glick reference, the Wolfe reference, and the Meyer reference. None of these references disclose a barrier such as required by the claims. For example, claim 1 requires a barrier connected to the conveyor belt. There is no such disclosure in any of the references cited by the Examiner.

Similarly, claim 9 requires "attaching a barrier to the conveyor belt" and inserting a quantity of material within the material chamber between the barrier and the conveyor belt. Again, none of the references disclose such a barrier.

Claim 15 was indicated by the Examiner to be allowable if amended to overcome the rejections under § 112. Applicant has inserted the barrier into claim 15, and therefore it is believed that claim 15 is also allowable in view of the cited art.

In view of the foregoing, Applicant respectfully requests that a Notice of Allowance be issued. If prosecution of this application can be facilitated by a telephone interview, Applicant invites the Examiner to telephone Applicant's Attorney of Record at the below-identified number.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



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- pw -